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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,778	05/23/2001	George A. Soli	41836/JWP/I267	2336

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EXAMINER

BUCZINSKI, STEPHEN C

ART UNIT	PAPER NUMBER
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3662

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/863,778	SOLI, GEORGE A.	
	Examiner	Art Unit	
	Stephen C. Buczinski	3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6 February 2004</u> . | 6) <input type="checkbox"/> Other: _____ |

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1. The advisory action mailed 25 February 2004 was in error to the extent that it did not take into account the new status of this application as an RCE. Accordingly, acknowledgement is hereby made for an RCE of the parent application 09/863,778.

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6 February 2004 has been entered.

2. Claims 1-18 are rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention is not supported by either a specific asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention.

With an acknowledgement of the need for clarification in the use of the term "superluminal" such that it only relates to a group velocity, the principle argument remaining shifts to the use of the presently disclosed timing variations that occur due to a principle alleged on page 5, line 13's replacement paragraph, where it states embodied within the paragraph: *"When the tunneling direction is in the direction of the red shift in the cosmic microwave background, the tunneling time is shortest, and when the tunneling is in the blue shift direction, the tunneling time is longest."* However, there is no clear support for this when the reference system is also moving in the same direction at all times. In other words, how can any shift be perceived while standing next to the measuring apparatus. There is no differential shift in velocity being measured, or at least none has been shown anywhere in the specification and drawings. Also, what is the *"direction of the red shift"* when it can be viewed relative to all other objects in all directions from within the expanding sphere of the universe?

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

5. Claims 1-11 and 17 are rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103 as obvious over Chiao.

Given that “superluminal” group velocity measurements will be more clearly supported in the original disclosure, the basic logical time comparison of a wave packet traveling over two paths, one through a tunnel barrier medium as described by Chiao in at least Fig. 2 of the reference, remains relevant. Any variation claimed on the apparatus for measuring the relative time differences as presently claimed would have been obvious over the general concepts of Chiao. To the extent that a “controller” is not specifically identified as such in Chiao, a controller would have been obvious if not inherent, since there must be control of the reference signal relative to the measured tunneling signal. While claims 6-10 relate to RF measurements, no clear distinction has been drawn over the principles at the RF wavelength that would not have been obvious. Any naturally occurring doppler shift must also effect the Chiao measurement inherently as claimed or at least would have been obvious as presented, if indeed this shift exists as argued above under 35 USC 112, paragraph 1.

Note that Claim 17 does not specifically relate to anymore than reorientation of the apparatus in a room or building, well within the scope of Chiao.

6. The drawings are objected under 37 CFR 1.83 in that every feature claimed still must be shown as argued above.

7. The specification is objected under 35 USC 112 as above for the improper implied use of the term “superluminal” that there exists a speed faster than the speed of light, beyond the group velocity effect. Note that the use of “superluminal” in quotes distinguishes it from false representations in the literature and in particular Winful’s article in Phys. Rev. Let.

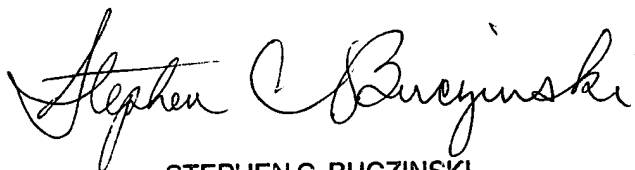
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen C. Buczinski whose telephone number is 703 305-1835. The examiner can normally be reached on Monday-Thursday, 5:30am-2:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Thomas Tarcza can be reached on 703 306-4171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen C. Buczinski
Primary Examiner
Art Unit 3662

A handwritten signature in black ink, reading "Stephen C. Buczinski". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

STEPHEN C. BUCZINSKI
PRIMARY EXAMINER